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012204

16569 U.S. PTO

PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

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012204

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<input type="checkbox"/> Additional inventors are being named on the _____ separately numbered sheets attached hereto					
TITLE OF THE INVENTION (500 characters max)					
APPLICATOR DEVICE FOR PAINT AND SURFACE COATINGS					
Direct all correspondence to: CORRESPONDENCE ADDRESS					
<input checked="" type="checkbox"/> Customer Number		32112			
OR		Type Customer Number here			
<input type="checkbox"/> Firm or Individual Name					
Address					
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ENCLOSED APPLICATION PARTS (check all that apply)					
<input checked="" type="checkbox"/> Specification		Number of Pages		<input type="checkbox"/> CD(s), Number	
<input checked="" type="checkbox"/> Drawing(s)		Number of Sheets		<input checked="" type="checkbox"/> Other (specify)	Corresp. Chart (1 pg)
<input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76					
METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT					
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.				FILING FEE AMOUNT (\$)	
<input checked="" type="checkbox"/> A check or money order is enclosed to cover the filing fees				80.00	
<input type="checkbox"/> The Commissioner is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number:		08-3240			
<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.					
The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.					
<input checked="" type="checkbox"/> No.					
<input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are: _____					

Respectfully submitted,

SIGNATURE

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Date

Jan 22, 2004

REGISTRATION NO.

29,077

(if appropriate)

Docket Number:

60735-300100

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

This collection of information is required by 37 CFR 1.51. The information is used by the public to file (and by the PTO to process) a provisional application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the complete provisional application to the PTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Box Provisional Application, Assistant Commissioner for Patents, Washington, D.C. 20231.

CORRESPONDENCE CHART
APPLICATOR DEVICE FOR PAINT AND SURFACE COATINGS
Wade Atteberry
60735.300100

This correspondence chart is provided for ease of understanding informational purposes only, and does not constitute a part of the formal patent application.

RefNum	Description	Group		RefNum	Description	Group
10	Applicator Glove Device					
12	Base glove					
14	Wrist Portion					
16	Palm Portion					
18	Thumb Portion					
20	First Finger Portion					
22	Second Finger Portion					
24	Third Finger Portion					
26	Fourth Finger Portion					
28	Palm Side					
30	Backhand Side					
32	Coating Liquid					
34	Surface					
36	Foam Layer					
38	Adhesive					
40						
42						
44						
46						
48						
50						
52						
54						
56						
58						

APPLICATOR DEVICE FOR PAINT AND SURFACE COATINGS

The following is a provisional application.

TECHNICAL FIELD

The present invention relates generally to applicators and more specifically for hand held devices adapted to applying paint, lacquers and other liquid coatings to a variety of surfaces.

BACKGROUND ART

Many different versions of applicators have been devised to apply paint and other coatings to various surfaces. Most commonly used are brushes of various sizes, textures and materials. However, other methods, such as sprayers, rollers and other devices have been utilized in attempts to efficiently and quickly apply paint, stains, lacquers and the like to various types of surface.

Some surfaces, such as wrought iron fences, pose particular problems. The irregular surfaces and gaps frustrate most attempts to coat these. Sprays are quick and provide even coverage, but waste the great majority of the paint. Rollers and brushes are slow and often leave gaps. Sheepskin mittens are messy and require substantial cleaning. Nothing available works well for these applications.

Numerous other applications also exist where it is desirable to provide an inexpensive and efficient device for applying coatings in manners which differ from conventional methods. Accordingly, a need remains for new approaches and applicator devices.

DISCLOSURE OF INVENTION

Accordingly, it is an object of the present invention to provide a paint and liquid coating applicator which is easy to use and inexpensive.

Another object of the invention is to provide a disposable applicator for single use jobs.

Yet another object of the invention is to provide a flexible yet accurate device for applying paint to irregular surfaces.

Briefly, one preferred embodiment of the present invention is an applicator device which is adapted for single use, disposable purposes. The applicator is a flexible liquid-proof glove which is provided with a layer of painter's foam on the front and side finger surfaces, as well as on the palm. The relatively thin layer of painter's foam absorbs and releases liquid coatings, such as paints and stains, in a controlled manner. The flexible glove applicator allows the painter to precisely apply the coating in a controlled manner.

An advantage of the present invention is that the applicator glove permits rapid and precise application of coatings to irregular surfaces.

Another advantage of the present invention is that the poly foam material retains the coating liquid without dripping or splattering until applied by hand pressure to the desired surface.

Still another advantage of the present invention is that the applicator glove is very flexible and can be manipulated precisely to apply painted figures such as straight lines and to quickly coat precise features such as door frames.

A further advantage of the present invention is that the applicator gloves can

be very inexpensively manufactured so that they may be used disposably, thus eliminating clean-up time and effort.

These and other objects and advantages of the present invention will become clear to those skilled in the art in view of the description of the best presently known modes of carrying out the invention and the industrial applicability of the preferred embodiments as described herein and as illustrated in the several figures of the drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

The purposes and advantages of the present invention will be apparent from the following detailed description in conjunction with the appended drawings in which:

Fig. 1 is a perspective view of an applicator glove according to the present invention, shown in use in applying coating to a selected surface;

Fig. 2 is a stylized plan view of the palm side of the applicator glove of the present invention;

Fig. 3 is a stylized plan view of an applicator glove according to the present invention, showing the back surface of the hand portion; and

Fig. 4 is a cross-sectional view taken through one of the finger portions shown in Figs. 2 and 3.

BEST MODE FOR CARRYING OUT THE INVENTION

A preferred embodiment of the present invention is a device adapted for applying paint, stains, lacquers or other coatings to a variety of surfaces. As illustrated in the various drawings herein, a form of this preferred embodiment of

the inventive device is an applicator glove designated by the general reference character **10**. The invention is intended to be worn on a user's hand during use.

As illustrated in the views of Figs. 1, 2 and 3, the basic applicator glove device 10 includes a base glove 12 which is characterized by having a wrist portion 14, a palm portion 16, a thumb portion 18, and first through fourth finger portions 20, 22, 24 and 26, respectively. The glove 12 is unitarily constructed so all of the portions are seamlessly connected together (the wrist portion 12 being the possible exception, as this may be attached in a seamed manner). The glove 12 may also be considered to have a palm side 28 and a backhand side 30. The palm side 28 is illustrated particularly in Fig. 2, while the backhand side 30 is illustrated in Fig. 3.

The unitary glove 10 is optimally constructed of waterproof materials (such as vinyl or polypropylene) so that the user's hand is not affected by whatever choice of coating liquid 32 is selected for application to a desired surface 34, such as the knurled wrought iron fence post illustrated in Fig. 1.

The palm side 28 of the applicator 10 is provided with a foam layer 36. Since most users prefer to use the palm side surface of their hands and fingers for application work, it is logical to place the foam layer 36 on the palm side 28.

The foam layer 36 is the same nature of painter's foam utilized in conventional foam paintbrushes. The preferred foam layer 36 is formed of black poly foam. The preferred embodiment 10 uses a foam layer having a thickness of 0.64 cm. Varying thicknesses of foam layers 36 may be optimal for different types of coatings 32. For example, an applicator adapted for coarse application of paint may have a relatively thick foam layer (approximately 1.27 cm) while a fine work application, for use on small objects or with delicate coatings 32, may have a lesser thickness (approximately 0.3 cm). The thickness of the foam layer 36 determines how much of the coating liquid is retained in the foam during usage and indirectly determines the surface area which may be coated without returning to the source of

coating liquid 32.

The foam layer 36 is adhered to the palm side 28 of the glove 12 by an adhesive 38 (shown in phantom in Fig. 4). The adhesive is selected to be unaffected by and insoluble in the types of coatings 32 (such as paints and lacquers) for which the invention is designed to be used. Typically, the adhesive selected will be 3M™ plastic foam adhesive. It is also conceivable that the foam layer 36 may be “welded” by melting onto the glove surface, or attached in some other fashion, but the adhesive approach is preferred.

It is considered highly desirable to have the foam layer 36 attached separately to each of the finger portions 20 through 26. This permits the user the maximum flexibility either to apply larger surface coatings by holding the fingers together, or to do fine work by using only a single finger during application. However, for some purposes it may be feasible to fuse the fingers together and utilize the concept as a painting mitt, as opposed to a glove.

Although standard paintbrush foam is the preferred material for the foam layer 36 it is envisioned that technological developments may occur in which additional materials may be substituted. The key features of the foam layer 36 are that the material readily accept and absorb coating liquids 32 in a fashion which allows ready release of the coating liquid 32 by pressure on the chosen surface 34. It is also important that little or no dripping of the liquid occurs when no pressure is applied. The foam layer is also expected to be inexpensive so that the applicator 10 will ordinarily be considered to be disposable and utilized for only a single job with a single type of coating. In this manner cleaning time and effort is minimized.

An alternate embodiment is visualized where the foam layer 36 is replaced with a layer of abrasive material. A scouring layer, such as a 3M ScotchBrite™ material may be substituted. An alternate glove of this structure could be used for

preparing the surface ahead of time and may be used either wet or dry. Such an embodiment would be reusable, unless actually used with coating material.

Another alternate embodiment would be to utilize a thicker base glove material with enhanced properties. One possible glove would be a Teflon or other acid resistant material to allow use with highly corrosive coating materials, while protecting the user's hand.

While various embodiments have been described above, it should be understood that they have been presented by way of example only, and not as limitation.

INDUSTRIAL APPLICABILITY

The present invention is adapted for use by professional and amateur painters. The user will purchase one or several of the applicator gloves 10 in an appropriate size to fit the hand(s) of the particular user. It is envisioned that both left and right hand versions will be available, and it may be that the gloves 10 will be distributed in pairs, but this is not required and many users will wish to use only a single hand.

The user will select the particular coating liquid 32 (usually paint) to apply to the surface and will array the coating 32 in a fashion where it is feasible to dip the glove 10 into the coating 32. The user will don the glove(s) 10 and dip the palm side 28 into the coating 32 until a sufficient degree of saturation is achieved. The properties of the foam layer 36 are such that only a certain amount of liquid is absorbed and it is difficult to over-saturate in a manner which results in dripping.

The user then simply applies the foam layer 36 portion of the glove 10 to the desired surface and the coating 32 will be squeezed or drawn out onto the surface 34 in a consistent manner. For larger, more uniform, surfaces the user may use

broad strokes with the fingers close together to provide a wider application zone, while for finer work, such as door jambs, a single finger may be used to precisely apply to paint.

Once the user completes use of a particular type (or shade) of coating, the glove 10 is set aside or discarded and a new glove 10 is selected for the next type or color. The gloves 10 are inexpensive enough that it is more efficient to discard and replace, than to attempt to clean the gloves for later use.

The inventive applicator devices are especially well suited for irregular surfaces, such as applying paint to wrought iron fences, or stain to chair legs and spokes. However, they are also well suited for standard painting applications where the direct reach of the user is sufficient to cover all of the desired territory.

For the above, and other, reasons, it is expected that the applicator glove device of the present invention will have widespread industrial applicability. Therefore, it is expected that the commercial utility of the present invention will be extensive and long lasting.

IN THE CLAIMS

1. An applicator device for applying coatings to surfaces, comprising:
a glove having a palm side portion; and

a foam layer attached to said palm side portion, the foam layer being characterized by being able to absorb coating liquids and to release such liquids to a surface when applied thereto.

(ADDITIONAL CLAIMS TO BE PROVIDED IN A NON-PROVISIONAL APPLICATION)

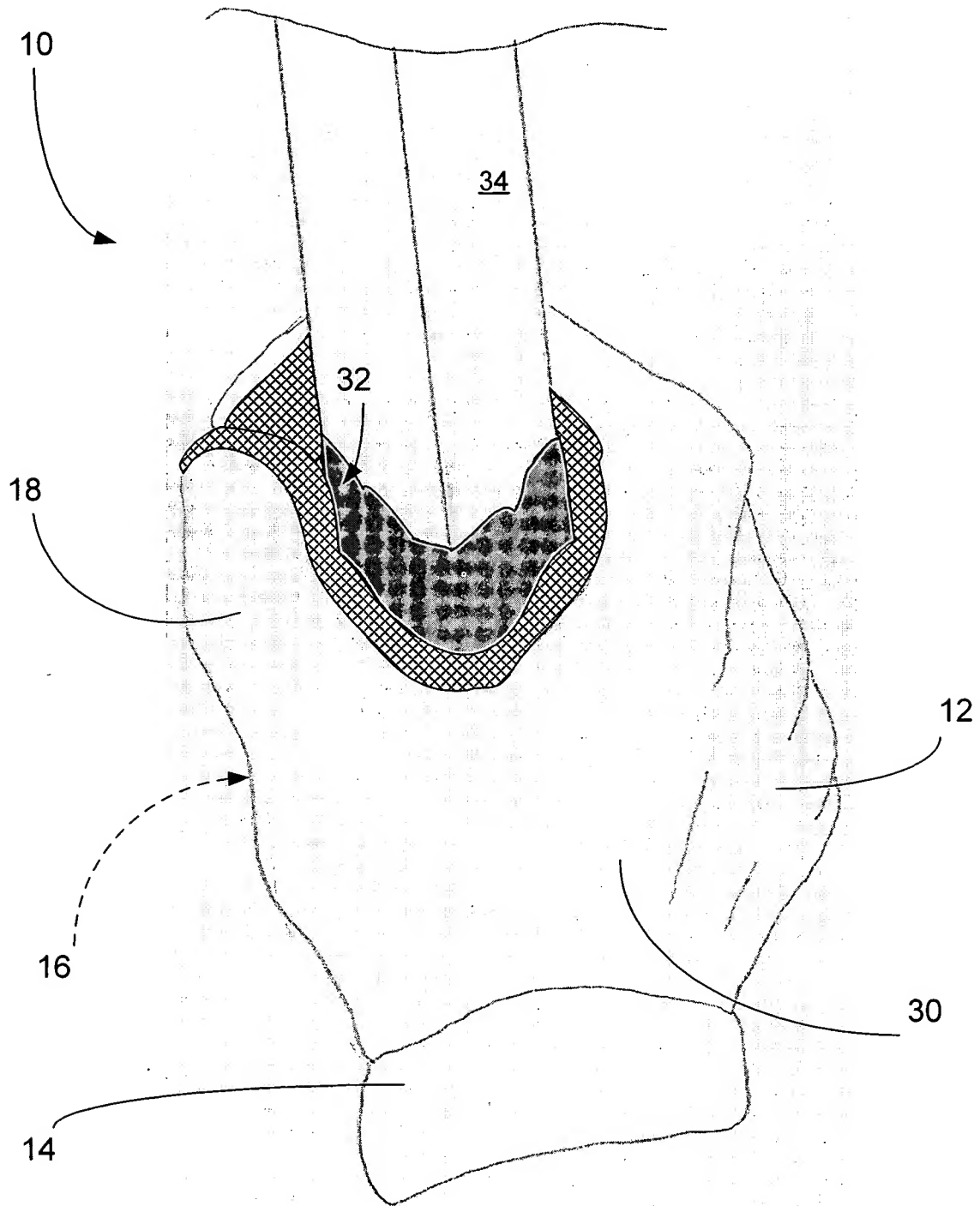


FIGURE 1

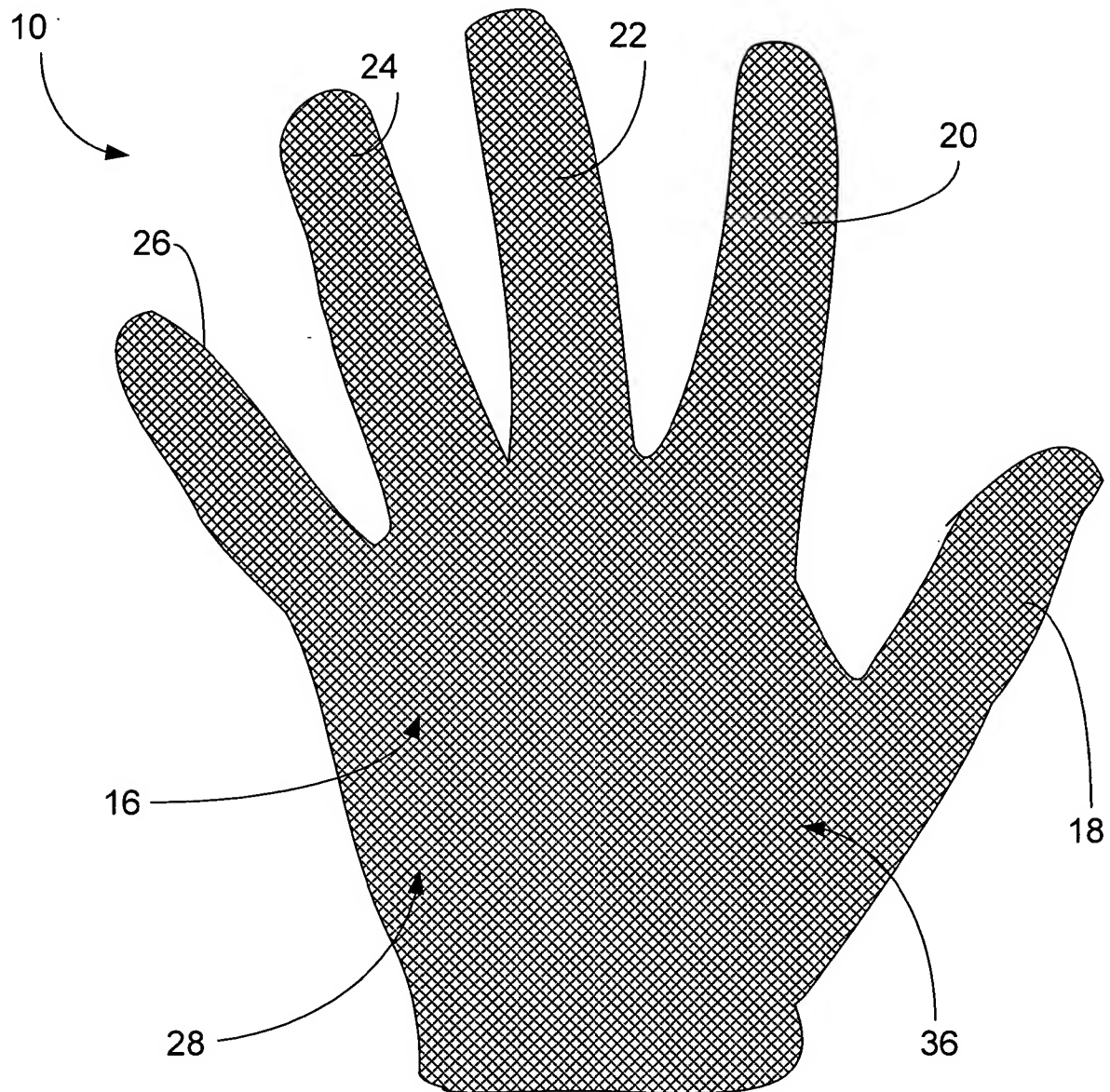


FIGURE 2

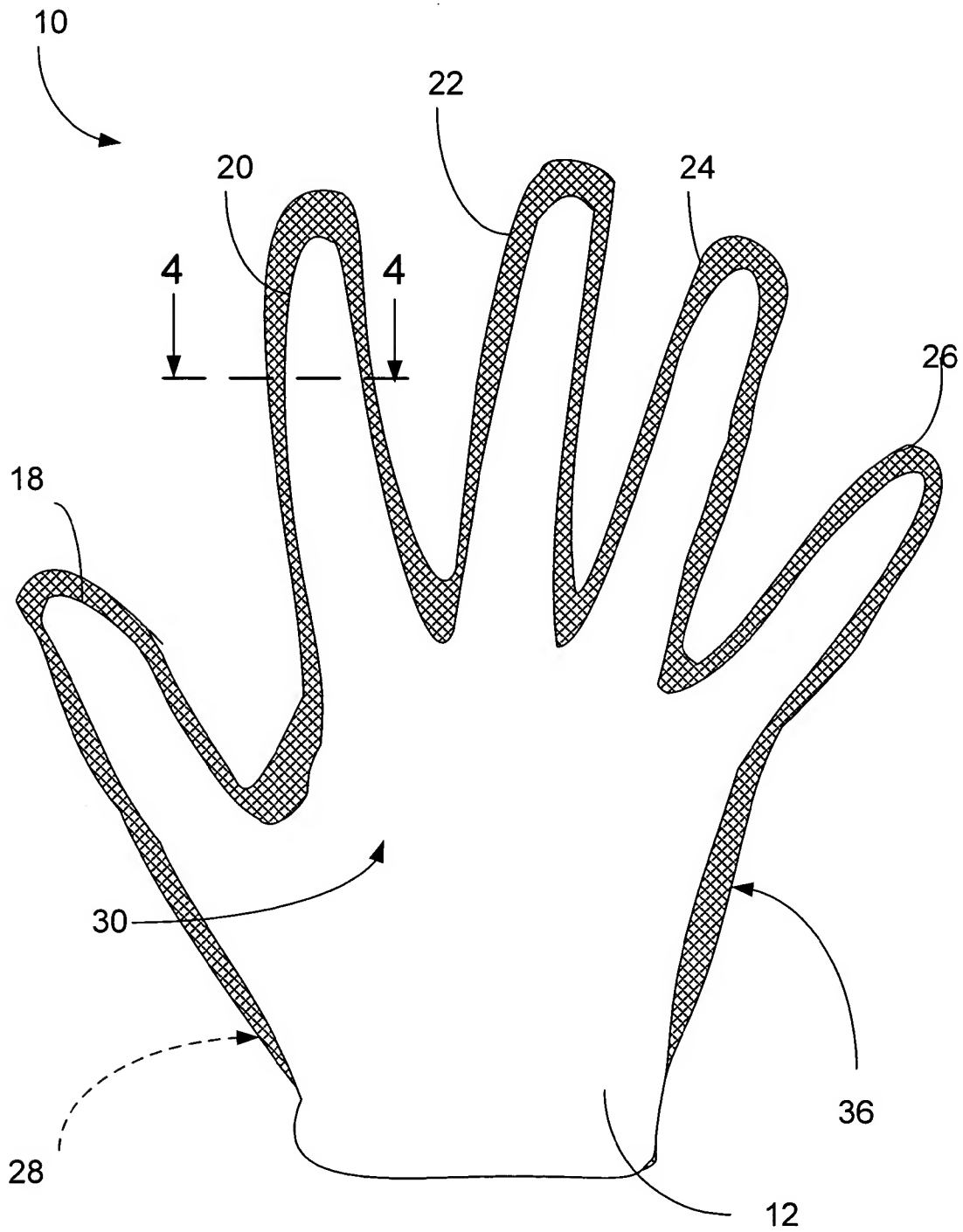


FIGURE 3

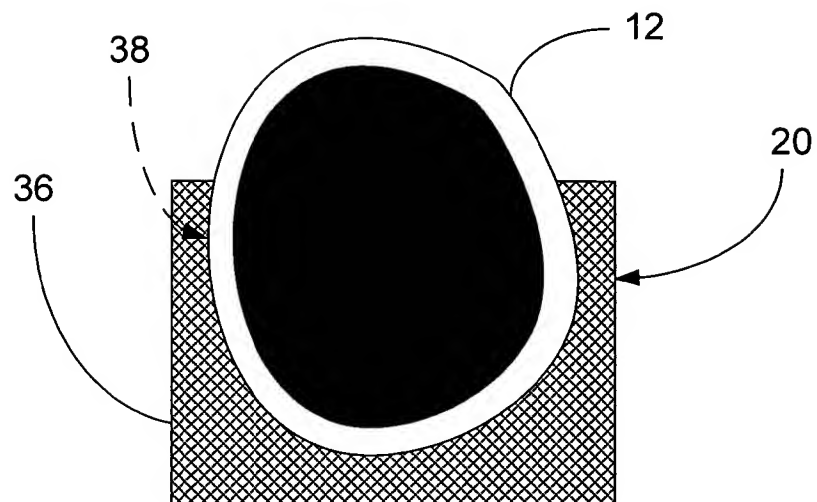


FIGURE 4